UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1450

P O Box 1450 Alexandria, Virgima 22313-1450

DATE MAILED: 04/28/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

29683 7590 04/28/2008 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212 EXAMINER
JANAKIRAMAN, NITHYA
ART UNIT PAPER NUMBER
2123

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,432	03/31/2004	Peter Feldmann	YOR920040053US1	7656

TITLE OF INVENTION: METHOD, APPARATUS AND COMPUTER PROGRAM PROVIDING BROADBAND PRECONDITIONING BASED ON REDUCED COUPLING FOR NUMERICAL SOLVERS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/28/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or transmitting the Patent nerwise in Bl	ng the ISSU , advance or ock 1, by (a					hould be completed when correspondence address a trate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				N Fo ps ha	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
29683	7590 04/28	/2008					of Mailing or Trans	mission
HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212				II St ad tra	hereby certify that t	his Feet	c) Transmittal is being	deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
								(Depositor's name)
								(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO)R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/815,432	03/31/2004			Peter Feldmann		YC	R920040053US1	7656
TITLE OF INVENTION REDUCED COUPLING	FOR NUMERICAL SC	LVERS						
APPLN, TYPE	SMALL ENTITY	ISSUE FI	EE DUE	PUBLICATION FEE DUI	PREV. PAID ISS	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO \$		140	\$300	\$0		\$1740	07/28/2008
EXAM	EXAMINER		JNIT	CLASS-SUBCLASS				
JANAKIRAM.	AN, NITHYA	21:	23	703-002000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is ident 1 in 37 CFR 3.II. Comp	" Indication food. Use of a s	orm Customer NTED ON		gle firm (having as agent) and the nar torneys or agents. I be printed. ype) patent. If an assign assignment.	a memb nes of u f no nan nee is id	per a 2p to p to a is 3	ocument has been filed fo
Please check the appropri	ate assignee category or	categories (v	vill not be pr	rinted on the patent):	Individual 🔲 (Corporati	ion or other private gro	oup entity Government
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			- 41	b. Payment of Fee(s): (PI A check is enclosed Payment by credit of The Director is here overpayment, to De	ard. Form PTO-203 by authorized to ch	8 is atta	sched. required fee(s), any de	
	SMALL ENTITY state	is. See 37 CF		☐ b. Applicant is no lo				
interest as shown by the r	Publication Fee (if requeended of the United Sta	uired) will no tes Patent and	t be accepte 1 Trademark	d from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. Th U.S.C. 122 a USPTO. Tir rden, should I O NOT SEND	ne information of 27 CFR ne will vary be sent to the FEES OR	on is required to obtain o 1.14. This collection is a depending upon the inc e Chief Information Offi COMPLETED FORMS	r retain a benefit by estimated to take 12 lividual case. Any c icer, U.S. Patent and TO THIS ADDRES	the pub minuter omment Trader S. SEN	lic which is to file (and s to complete, includin is on the amount of tir nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

288: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 04/28/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/815,432	03/31/2004	Peter Feldmann	YOR920040053US1	7656		
29683 7	590 04/28/2008		EXAM	UNER		
HARRINGTON & SMITH, PC 4 RESEARCH DRIVE			JANAKIRAMAN, NITHYA			
			ART UNIT PAPER NUMBER			
SHELTON, CT 06	5484-6212	2123				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 505 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 505 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/815,432	FELDMANN ET AL.				
Examiner	Art Unit				
NITHYA JANAKIRAMAN	2123				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

 1. \(\sum \) This communication is responsive to \(\frac{1/31/08}{2} \).
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

2. The allowed claim(s) is/are 1-8 and 25-40.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

Application/Control Number: 10/815,432 Page 2

Art Unit: 2123

DETAILED ACTION

This action is in response to the submission filed on 1/31/08. Claims 1-8 and 25-40 are presented for examination.

Allowable Subject Matter

- Claim 1-8 and 25-40 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: while Ushiro (US 5,604,911) teaches a method to determined information indicative of at least one property of a physical entity by utilizing a linear system of equations to represent the physical entity, neither this reference, taken either alone or in combination with the prior art of record disclose: "partitioning the mesh representation into a plurality of partitions separated by partition boundaries, wherein each partition comprises at least two mesh elements of the plurality of mesh elements",

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicant's invention defines over the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Application/Control Number: 10/815,432 Page 3

Art Unit: 2123

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NITHYA JANAKIRAMAN whose telephone number is (571)270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nithya Janakiraman/ Examiner, Art Unit 2123

NI

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123